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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,068	12/21/2001	Robert J. Abrams	LUC-319/Abrams	9847
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CARMEN B. PATTI & ASSOCIATES, LLC ONE NORTH LASALLE STREET 44TH FLOOR CHICAGO, IL 60602			EXAMINER JONES, PRENELL P	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/027,068

Applicant(s)

ABRAMS ET AL.

Examiner

Prenell P. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-19 is/are rejected.
- 7) ☐ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard (US PG PUB 2002/0176404) in view Berger et al (US PGPUB 2006/0023696) and Forslow (US PAT. 6,608,832).

Regarding claim 1, Girard discloses setting up a first part of a multi-media call utilizing packet-switched resources on a communication network (Fig. 2, a distributed edge switch (single point of control) that supports the delivery of multi-media services whereby each subscriber premise or party is associated with communicating in a call, thereby making each subscriber or party a part of the call session, a subscriber (first part of call) dials a number which

connects to the packet network, paragraph 0082-0087) setting up a second part of the multi-media call utilizing circuit-switched resources, (Fig. 3, edge switch supplies at the subscriber premise packet data path from the premise to the packet transport network/packet switched, and it also provides a means by which voice, video and data terminals at the subscriber premise may connect to other network endpoints in the packet transport network, each creating connections through a shared bandwidth, routed IP data interface, call setup for a subscriber/endpoint at one end of the call connected to packet network and a second subscriber/endpoint at the receiving end is connected to the PSTN, paragraph 0106). However Girard is silent on a single point of control waits for circuit-switched to become available while resources are changed to packet-switched resources, and wherein a single point of control reallocates packet-switched and circuit-switched resources independently for different parts of the multi-media call. In a communication system that utilizes circuit switched and packet switched resources, Berger discloses a network that utilizes both circuit switching and packet switching resources wherein the architecture includes routing calls to a plurality of users via a central HUB (Abstract, Fig. 1, plurality of users gain access to either circuit switched or packet switched resources via a single central point/HUB (20) which mediates external resources, HUB creates a multi-line/multi-function/multi-media presentation to the network using a combination of circuit switched and packet switched resources (paragraph 0024, 0030, 0033), HUB is configured to notify user and allocate resources (circuit switched) when a user has placed a call with the packet switched resources, user is notified by HUB when circuit switched resources are available (Fig. 9, paragraph 0037, 0038), and Forslow discloses call control for the multi-media call is handled by a signal point of control, wherein single point of control reallocates packet-switched and circuit-switched resources independently for different parts of the multi-media (Abstract, Fig. 11, common access/common access server is utilized between nodes

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communicating in a multi-media environment wherein allocation of packet-switched resources and circuit-switched resources is implemented, a single common access is utilized, a procedure is performed in allocation/re-allocation of resources whereby a session associated with a call that occupies a circuit switch connection is performed instead of waiting for packet switched to be released therefore, resource connections are independent of one another, col. 16, line 1-28, col. 17, line 45-67, col. 18, line 6-20, col. 20, line 48-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement a single point of control waiting for circuit switched resources to become available while resources are changed to packet switched resources, and a multi-media call being handled by a signal point of control, wherein single point of control reallocates packet-switched and circuit-switched resources independently for different parts of the multi-media call as taught by the combined teachings of Berger and Forslow with the teachings of Girard for the purpose of further providing resource management as associated with multi-media access and at the same time adding low cost and improving set-up time.

Regarding claim 2, Girard further discloses assigning part of the multi-media call to at least one of a packet-switched resource and a circuit-switched resource based on at least one of bandwidth, QoS, and real-time requirement for the part of the multi-media call (paragraph 0174, Edge switch negotiates the creation of multi-media streams, paragraph 0175, Edge switch uses network-based resources to associate a dialing number (part of call) with an IP address, as required to setup the SIP call session, communications between set-top boxes is based on some carrier-specific/bandwidth, paragraph 0176, the edge switch performs QoS between all terminals competing for broadband access network transmission capacity, transmission

capacity is dynamically reserved for voice and video transmission, paragraph 005 and 0096, system supports real-time monitoring of service delivery).

Regarding claim 3, as indicated above, Girard further discloses setting up a third part of a multi-media call without affecting resources allocated to a first part of a multi-media call and a second part of the multi-media call (Fig. 3, all services stored on Edge switch is accessible to third parties as well as first part of call and second part of call, paragraph 0099).

6. Claims 6-12, 14 and 16-18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Das et al (Unpatented Literature; Wireless Network) in view of Berger et al (US PG PUB 2006/0023696) and Forslow (US PAT. 6,608,832).

Regarding claims 6-12, 14 and 16-18, Das discloses a call admission and control scheme for QoS in next generation wireless networks wherein multimedia traffic/call, which is classified as real-time (voice or video/circuit switched) and non-real-time (packet data/packet switched) is supported and QoS is utilized to guarantee QoS between end-users, whereby users request resources to initiate call setup (Fig. 1, Fig. 2, page 18, left col. & right col.), user requirements may require real-time/circuit switched and non-real-time/packet switched resource (page 19, left column, paragraph 2 and 3), when a real-time call request is made and it is found that all channels are unavailable, the user maybe assigned a non-real-time resource and visa versa, determine if real-time request or non-real-time request is available (page 19, right col., page 22, left col., paragraph 2, 3, 4, right col., paragraph 1-4), and allocating of resources. However, DAS is silent on a single point of control waits for circuit-switched to become available while resources are changed to packet-switched resources, and wherein a single point of

control reallocates packet-switched and circuit-switched resources independently for different parts of the multi-media call. In a communication system that utilizes circuit switched and packet switched resources, Berger discloses a network that utilizes both circuit switching and packet switching resources wherein the architecture includes routing calls to a plurality of users via a central HUB (Abstract, Fig. 1, plurality of users gain access to either circuit switched or packet switched resources via a single central point/HUB (20) which mediates external resources, HUB creates a multi-line/multi-function/multi-media presentation to the network using a combination of circuit switched and packet switched resources (paragraph 0024, 0030, 0033), HUB is configured to notify user and allocate resources (circuit switched) when a user has placed a call with the packet switched resources, user is notified by HUB when circuit switched resources are available (Fig. 9, paragraph 0037, 0038), and Forslow discloses call control for the multi-media call is handled by a signal point of control, wherein single point of control reallocates packet-switched and circuit-switched resources independently for different parts of the multi-media (Abstract, Fig. 11, common access/common access server is utilized between nodes communicating in a multi-media environment wherein allocation of packet-switched resources and circuit-switched resources is implemented, a single common access is utilized, a procedure is performed in allocation/re-allocation of resources whereby a session associated with a call that occupies a circuit switch connection is performed instead of waiting for packet switched to be released therefore, resource connections are independent of one another, col. 16, line 1-28, col. 17, line 45-67, col. 18, line 6-20, col. 20, line 48-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement a multi-media call being handled by a signal point of control, wherein single point of control reallocates packet-switched and circuit-switched resources independently for different parts of the multi-media call as taught by the combined teachings of Berger and Forslow with

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the teachings of DAS for the purpose of further providing resource management as associated with multi-media access and at the same time adding low cost and improving set-up time.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Girard (US PG PUB 2002/0176404) in view of Berger et al (US PG PUB 2006/0023696) and Forslow (US PAT. 6,608,832 as applied to claim 1 above, and further in view of Elliott (US PAT 6,618,384).

Regarding claim 5, as indicated above, the combined teachings of Girard, Berger and Forslow discloses a distributed edge switch for voice over packet multi-service network wherein, a single point of control waits for circuit switched resources to become available while resources are changed to packet-switched resources, and circuit switched and packet switched resources are allocated independently as associated with call sessions. However, Girard and Forslow are silent on implementing instructions for allocating services on a computer readable signal-bearing medium. In analogous art, Elliott discloses a computer-readable signal-bearing medium that includes a computer readable program code that implements setting-up a subscriber to an ATM and setting up a subscriber to a PSTN (a computer usable medium of instructions in a variety of forms for setting up or processing a call as associated with the implementation of the current invention, col. 6, line 41-60). Therefore, it would have been obvious to one of ordinary skilled in the art to implement the instructions for setting up a call on a computer readable medium as taught by Elliott with the combined teachings Girard, Berger and Forslow for the purpose of carrying out distribution of resources as associated in a communication environment in an orderly fashion.

8. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Das et al (Unpatented Literature; Wireless Network in view of Berger et al (US PG PUB



2006/0023696) and Forslow (US PAT. 6,608,832) as applied to claims 6 and 14 above and further in view of Elliott (US PAT 6,618,384).

Regarding claims 13 and 19, as indicated above, the combined teachings of Das, Berger and Forslow discloses a call admission and control scheme for QoS in next generation wireless networks wherein multimedia traffic/call request service/resource allocation, a single point of control waits for circuit switched resources to become available while resources are changed to packet-switched resources, and circuit switched and packet switched resources are allocated independently as associated with call sessions. However, Das, Berger and Forslow fail to teach or suggest implementing instructions for allocating services on a computer readable signal-bearing medium. In analogous art, Elliott discloses a computer-readable signal-bearing medium that includes a computer readable program code that implements setting-up a subscriber to an ATM and setting up a subscriber to a PSTN (a computer usable medium of instructions in a variety of forms for setting up or processing a call as associated with the implementation of the current invention, col. 6, line 41-60). Therefore, it would have been obvious to one of ordinary skilled in the art to implement the instructions for setting up a call on a computer readable medium as taught by Elliott with the combined teachings Das, Berger and Forslow for the purpose of carrying out distribution of resources in an orderly fashion.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Das et al (Unpatented Literature; Wireless Network) in view of Berger et al (US PG PUB 2006/0023696) and Forslow (US PAT. 6,608,832) and further in view of Girard (US PG PUB 2002/0176404).

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Regarding claims 15, as indicated above, the combined teachings of Das, Berger and Forslow discloses a call admission and control scheme for QoS in next generation wireless networks wherein multimedia traffic/call request service/resource allocation, a single point of control waits for circuit switched resources to become available while resources are changed to packet-switched resources and circuit switched and packet switched resources are allocated independently as associated with call sessions. However, Das, Berger and Forslow are silent on a second party joining call. In analogous art, Girard discloses setting up calls in a multi-media environment (Fig. 2 and 3) wherein an additional party can join call. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement allowing addition parties to join calls as taught by Girard with the combined teachings of Das and Forslow for the purpose of allowing multiple users to communicate on the same call simultaneously as it is associated in a multimedia environment.

#### ***Allowable Subject Matter***

1. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
2. The following is a statement of reasons for the indication of allowable subject matter: Although the combined prior art discloses of Girard (US PG PUB 2002/0176404), Das et al (Unpatented Literature; Wireless Network), Berger et al (US PGPUB 2006/0023696), Forslow (US PAT. 6,608,832), Elliott (US PAT 6,618,384) discloses a distributed edge switch for voice over packet multi-service network wherein, a single point of control waits for

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circuit switched resources to become available while resources are changed to packet-switched resources, and circuit switched and packet switched resources are allocated independently as associated with call sessions, and a call admission and control scheme for QoS in next generation wireless networks wherein multimedia traffic/call request service/resource allocation, they fail to teach a single point of control blocking new calls while resources are changing from circuit switched to packet switched.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prenell P. Jones whose telephone number is 571-272-3180. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones

May 22, 2006

  
CHI PHAM  
ADVISORY PATENT EXAMINER  
5/24/06